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Hydroformylation

Abstract

Olefins having at least 6 carbon atoms are hydroformylated in the presence of a homogeneous catalyst in a continuous process in which a) a vertical tall cylindrical reactor (1) whose interior space is divided by means of internals (2) into at least two reaction chambers which extend essentially in the longitudinal direction of the reactor is used, b) at least one olefin is introduced into the reactor together with synthesis gas at the lower end of the first reaction chamber, c) a partially reacted reaction mixture is conveyed from the upper end of a reaction chamber to the lower end of a next reaction chamber; and d) the hydroformylated olefin is taken off at the upper end of the last reaction chamber. The process allows a high conversion at a given reactor volume.

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with Fig. 1

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